AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A packet-based communication routing device, comprising:

one or more inputs to a router that receive information packets on a network and one or more outputs that transmit information packets onto the network;

a first network processor on the router coupled to said inputs and said outputs, said first network processor [[processing]] parsing address header information in one of the information packets including examining one or more flag values in [[each]] the information packet and transmitting the information packet to one of said outputs if at least one of the flag values do not match a predetermined value indicating a requirement for additional processing of control function data for that routing device;

a second signaling processor on the router coupled to said first network processor, wherein said first network processor transmits an information packet to the second signaling processor if the one or more flag values match a predetermined value indicating a requirement for additional processing of control function data for that routing device; and

wherein the second signaling processor processes control function data in the information packet before transmitting the information packet to one of said outputs.

2. (Original) The packet-based communication routing device of Claim 1 wherein the flag value contains a data element identifying a filtered router alert option.

3. (Original) The packet-based communication routing device of Claim 1 wherein the flag value identifies the type of data from the information packet to be processed by the second processor.

4. (Original) The packet-based communication routing device of Claim 1 wherein the flag value identifies a condition on the routing device that indicates the information packet should be forwarded to the second processor.

5. (Original) The packet-based communication routing device of Claim 1 wherein the flag value identifies the routing device as an edge router.

6. (Original) The packet-based communication routing device of Claim 1 wherein the flag value identifies the routing device as a gateway.

7. (Original) The packet-based communication routing device of Claim 1 wherein the flag value identifies the routing device as an interface.

8. (Currently Amended) A method for routing an information packet on a packet-based communication system comprising the steps of:

receiving an information packet on an input of a router, said router having a first processor performing fast-path processing coupled to a second processor performing slow-path processing;

checking a flag value in the information packet at [[a]] the first processor to determine if the information packet requires slow-path processing on [[a]] the second processor;

forwarding the information packet to an output on the router for transmission onto the network if the flag value does not match a predetermined value indicating requiring slow-path processing;

forwarding the information packet to [[a]] the second processor for slow-path processing of control function data in response to a match of the flag value to said predetermined value; and

forwarding the information packet from the second processor to said output for transmission onto the network after said slow-path processing is completed.

9. (Original) The method for routing an information packet on a packet-based communication system of Claim 8 wherein the flag value contains a data element identifying a filtered router alert option.

10. (Original) The method for routing an information packet on a packet-based communication system of Claim 8 wherein the flag value indicates the portions of the information packet that require processing at the second processor.

11. (Original) The method for routing an information packet on a packet-based communication system of Claim 8 further comprising the step of:

processing the information packet on an edge router.

12. (Original) The method for routing an information packet on a packet-based communication system of Claim 8 further comprising the steps of:

processing the information packet on a gateway.

13. (Original) The method for routing an information packet on a packet-based communication system of Claim 8 further comprising the step of:

processing the information packet on an interface

14. (Original) The method for routing an information packet on a packet-based communication system of Claim 8 further comprising the step of:

processing the information for use by an application.

15. (Currently Amended) A method for routing an information packet on a packet-based communication system comprising the steps of:

receiving an information packet on an input of a [[first]] router;

checking a flag value in the information packet at a first processor in the router to determine if the information packet requires higher-level processing on a second processor;

forwarding the information packet to an output on the [[first]] router for transmission onto the network if the flag value does not match a predetermined value indicating a requirement for higher-level processing;

forwarding the information packet to a second processor in the router for higher-level processing in response to a match of the flag value to said predetermined value indicating a requirement for higher-level processing;

forwarding the information packet from the second processor to said output for transmission onto the network after higher-level processing is completed; and

retrieving specific control function data from the information packet during the higher-level processing.

16. (Original) The method for routing an information packet on a packet-based communication system of Claim 15 wherein a filtered router alert includes a type data field and a flag value data field.

17. (Original) The method for routing an information packet on a packet-based communication system of Claim 15 comprising the step of:

forwarding the retrieved data for use on an interface.

18. (Original) The method for routing an information packet on a packet-based communication system of Claim 15 further comprising the step of:

forwarding the retrieved data for use in an application.

19. (Original) The method for routing an information packet on a packet-based communication system of Claim 15 further comprising the step of:

forwarding the retrieved data for use on a gateway.

20. (Original) The method for routing an information packet on a packet-based communication system of Claim 15 further comprising the step of:

transmitting the retrieved data onto the network.